



Docket No.
448563/0217

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: **Kazuhiro Hashii, et al.**

Group Art Unit: **2861**

Application No.: **10/649,806**

Examiner: **Not Yet Known**

Filed: **August 26, 2003**

For: **INK CARTRIDGE AND RECORDING APPARATUS**

Date: **March 22, 2004**

PRELIMINARY AMENDMENT

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Prior to examination on the merits, please amend the subject application as follows.

Amendments to the Claims are reflected in the listing of claims which begins on page 2 of this paper.

Remarks begin on page 11 of this paper.

2. (Original) The ink cartridge according to claim 1, wherein the pressing member of the recording apparatus has a position restricting elastic piece formed, and the upper surface of the pressed portion includes an upper surface of the first projecting portion, and when the ink cartridge is mounted on the recording apparatus, the upper surface of the first projecting portion is pressed toward the bottom wall by the position restricting elastic piece.

3. (Original) The ink cartridge according to claim 1, wherein the pressing member of the recording apparatus has a cartridge holding mounting lever, wherein the pressed portion includes a lever receptacle portion, and the lever receptacle portion is pressed toward the bottom wall by the mounting lever.

4. (Original) The ink cartridge according to claim 3, wherein the lever receptacle portion includes a second projecting portion disposed at a rear side of the first projecting portion in an insertion direction of the ink cartridge into the recording apparatus.

5. (Original) The ink cartridge according to any one of claims 1 to 4, further comprising a guide projecting portion extending in a loading direction of the container and which is located below the retaining member.

6. (Original) The ink cartridge according to any one of claims 1 to 4, further comprising a recessed portion formed in another wall adjacent to the wall that is formed with the first projecting portion.

7. (Original) The ink cartridge according to any one of claims 1 to 4, further comprising a valve body that is normally maintained in a closed valve state by a biasing member, and an elastic sealing member that abuts the valve body and that elastically contacts an outer circumference of an ink supply member formed in the recording apparatus, the valve body and the elastic sealing member being housed in the ink supply port.

8. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the retaining member includes a lever having an engagement portion engageable with the part of the recording apparatus, and the lever has at least one projection that biases an upper portion of the lever outward as the cartridge is mounted on the recording apparatus.

9. (Original) The ink cartridge according to claim 8, wherein the at least one projection includes two side projections, said side projections being respectively provided on each side surface of the lever.

10. (Original) The ink cartridge according to any one of claims 1 to 4, wherein a width of the first projecting portion is narrower than a width of the ink container.

11. (Original) The ink cartridge according to any one of claims 1 to 4, wherein a region serving as the upper surface of the pressed portion when the cartridge is mounted on the recording apparatus includes a flat surface.

12. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the electrodes are arranged in at least two rows, and the rows are perpendicular to an axis of the ink supply port.

13. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the retaining member includes a lever having an engagement portion engageable with the part of the recording apparatus, and the lever comprises an elastic member that urges the ink container toward the projecting portion side.

14. (Original) The ink cartridge according to any one of claims 1 to 4, further comprising an elastic sealing member, housed in the ink supply port, that engages an ink supply member of the recording apparatus when the ink cartridge is mounted on the recording apparatus.

15. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the second side wall has at least one of a pinching recess and a protruded portion.

16. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the second side wall is elongated in an insertion direction of the ink cartridge into the recording apparatus so that a length of the second side wall in the insertion direction is longer than a length of the second side wall in a direction perpendicular to the insertion direction.

17. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the electrodes and the memory unit are disposed on a circuit board mounted on a surface of the

first projecting portion, the surface of the first projecting portion is parallel to an insertion direction of the ink cartridge into the recording apparatus, and the electrodes are formed on an exposed surface side of the circuit board.

18. (Original) The ink cartridge according to claim 17, wherein each of the electrodes has a vertically elongated shape so that a length of each of the electrodes in a vertical direction is longer than a length of each of the electrodes in a lateral direction perpendicular to the vertical direction.

19. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the electrodes and the memory unit are formed on a circuit board, and the electrodes are disposed on the circuit board at an offset position closer to the bottom wall than to the upper wall.

20. (Original) The ink cartridge according to claim 4, wherein the second projecting portion is located within a region defined by and between the outermost electrodes in a direction that is perpendicular to an insertion direction of the ink cartridge into the recording apparatus and that is parallel to the second side wall.

21. (Original) The ink cartridge according to claim 4 or 20, wherein a height of the second projecting portion from the second side wall is smaller than a height of the first projecting portion from the second side wall.

22. (Original) The ink cartridge according to claim 4 or 20, further comprising:
an erroneous insertion preventive identification piece disposed between the first projecting
portion and the second projecting portion.

23. (Original) The ink cartridge according to claim 22, wherein the erroneous
insertion identification piece is constructed as a block, and the block is fixed to the ink
container by a fixing member.

24. (Original) The ink cartridge according to claim 22, wherein the erroneous
insertion identification piece and the first projecting portion are constructed as a unitary block,
and the unitary block is fixed to the ink container by a fixing member.

25. (Original) The ink cartridge according to claim 23, further comprising: a
positioning system that is disposed on a back surface of the block and the second side wall of
the ink container.

26. (Original) The ink cartridge according to claim 4, wherein the upper surface
of the second projecting portion at least partially extends perpendicular to a surface on which
the electrodes are formed.

27. (Original) The ink cartridge according to claim 1, further comprising at least
one of a projection, a ridge and a groove formed on one of the side portions of the first
projecting portion .

28. (Original) The ink cartridge according to claim 1, further comprising a first one of a projection, a ridge and a groove formed on a first said side portion and a second one of a projection, a ridge and a groove formed on a second said side portion of the first projecting portion .

29. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the side portions of the first projecting portion respectively define side surfaces parallel to an insertion direction of the ink cartridge into the recording apparatus.

30. (Original) The ink cartridge according to claim 3, wherein the lever receptacle portion is integral with the first projecting portion on which the electrodes are disposed.

31. (Original) The ink cartridge according to claim 22, wherein a distal end of the identification piece is protruded outward beyond a surface on which the electrodes are formed.

32. (Original) The ink cartridge according to claim 22, wherein a plurality of the identification pieces are disposed.

33. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the side portions of the first projecting portion and the upper surface of the pressed portion have specific and predetermined positions when the cartridge is mounted on the recording apparatus.

34. (Original) The ink cartridge according to any one of claims 1 to 4, further comprising a block disposed on the second side wall, the block including:

a block body having a pair of parallel sides, a back surface intersecting the parallel sides, and a flat face intersecting the parallel sides; and

at least one projection having a tip and extending outward from the block body in the direction from the back surface toward the flat face, the tip of the projection being disposed further from the back surface than the face.

35. (Original) The ink cartridge according to claim 34, further comprising at least two said projections.

36. (Original) The ink cartridge according to claim 34, wherein the projections lie in parallel planes.

37. (Original) The ink cartridge according to claim 34, wherein the projections and the parallel sides all lie in parallel planes.

38. (Original) The ink cartridge according to claim 34, wherein the electrodes are disposed on the flat face.

39. (Original) The ink cartridge according to any one of claims 1 to 4, wherein the retaining member can be a lever.

40. (Original) The ink cartridge according to claim 1, wherein the pressed portion can be a lever-pressed portion.

41. (Original) The ink cartridge according to claim 1, wherein the member of the recording apparatus is a position restricting elastic piece which presses the pressed portion toward the bottom wall of the ink container.

42. (Original) The ink cartridge according to claim 1, wherein the member of the recording apparatus is a cartridge holding mounting lever which presses the pressed portion toward the bottom wall of the ink container.

43-80. (Cancelled).